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EXAMINER

JARRETT, SCOTT L

ART UNIT PAPER NUMBER

3623

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/824,853		JACOBS ET AL.	
	Examiner		Art Unit	
	Scott L. Jarrett		3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 16 February 2006.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 2 and 8-12 is/are pending in the application.

 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 2 and 8-12 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a) ☐ All b) ☐ Some * c) ☐ None of:

 1. ☐ Certified copies of the priority documents have been received.

 2. ☐ Certified copies of the priority documents have been received in Application No. _____.

 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/22/05, 2/16/06</u> .	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____.
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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 9, 2006 has been entered.

Applicant's amendment amended claims 8-12 and canceled claims 1 and 3-7. Currently Claims 2 and 8-12 are pending.

Response to Amendment

2. The Objection to the Title is withdrawn in response to Applicant's amendments to the Title.

Response to Arguments

3. Applicant's arguments with respect to Claims 2 and 8-12 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., scheduling a *particular worked with a set of desired skills*, generating a list of

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schedulable time blocks *for a worker matching customer criteria*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Information Disclosure Statement

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the examiner on form PTO-892 has cited the references, they have not been considered.

The attempt to incorporate subject matter into this application by reference to Guy Druce, Level-I Algorithm, V1.6, is improper (Specification; Page 4).

Appropriate correction required.

Examiner requests applicant provide a copy of above cited reference.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2 and 8 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention.

The public use or sale of the invention, a system and method for assigning orders to openings in a schedule, sold by the Applicant under one or more of the following product/service names: Field Service, Advantex-Field Service and/or Advantex, is evidenced by at least the following:

I. Vantive and MDSI to Provide Enterprise-Wide Wireless Field Service Solution (1998), herein after reference A;

II. MDSI-Advantex.com Web Pages (December 1998), herein after reference B.

MDSI teaches a system and method for assigning an order to an opening in a schedule after a customer has selected an appointment window in the schedule, wherein the opening and the appointment are specified (appointment scheduling, order/workload dispatching/assignment/distribution, reference A: Paragraphs 2-3, Page 1; Paragraph 1, Page 2; reference B: Page 2; Paragraph 2, Page 3).

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An issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under 35 U.S.C. 102(b), additional information regarding this issue is required as follows: please provide the names of any products or services that have incorporated the claimed subject matter (e.g. MDSI FieldService, MDSI Advantex, etc.) as well as information regarding their public use and/or sale (e.g. product road maps, sales presentations, investor disclosures, case studies, product manuals, product brochures, etc.), and provide a citation and a copy of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter and/or products or services.

Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 2 is rejected under 35 U.S.C. 102(e) as being anticipated by Powell et al., U.S. Patent Publication No. 2001/0049619.

Regarding Claim 2, Powell et al. teach a system and method for assigning an order to an opening (time period, shift, calendar, schedule, service provider schedule, time bands, etc.) in a schedule after a customer has selected (requested, picked, chosen, etc.) an appointment window in the schedule (service order, appointment time window), wherein the opening and the appointment window are specified, the method/system comprising (Abstract, Paragraphs 0001, 0004, 0014-0017, 0021-0022, 0034-0037, 0042-0045, 0055):

- generating a list of schedulable time blocks (appointments, reservations, delivery windows, time ranges/slots, estimate of daily schedule, etc.) for a shift (route, itinerary, schedule, calendar, etc.) identified in the opening (number of days/weeks, service provider schedule/availability, etc.; Abstract; Paragraphs 0016-0017, 0034, 0045, 0055; "A service provider can quickly generate a schedule in real time with

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narrow time windows at which a service technician may be on site at a customer's residence or facility.", Paragraph 0022; ; Figure 2, Figure 4, Elements 54, 56);

- intersecting (overlying, mapping, matching, unioning, etc.) the opening and the appointment window to obtain a time range defined by the overlap of the opening and the appointment window (actual service request replacing matching/closets estimated/forecasted service request; Paragraphs 0017, 0036-0037, 0045, 0055; Figure 4, Elements 54, 58, 60); and

- choosing (selecting, picking, etc.) the opening (available resource, route, appointment, time period/block/window) in which to assign the order if a schedulable time block from the list of schedulable time blocks includes the opening and wherein the opening is within the time range (Paragraphs 0016-0017, 0021-0022, 0049, 0054, 0065).

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9. Claims 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by WebVan as evidenced by at least the following:

I. Clyde, Witt, UPDATE: Material Handling in the Food Industry (October 1999), herein after WV1;

II. Borders et al., WO 00/68859 (November 2000), herein after WV2; and

III. Borders et al., WO 00 (November 2000), herein after WV3.

Regarding Claim 8 WebVan teaches a system and method for assigning an order to a schedule after a customer has specified an appointment window in the schedule, the method/system comprising (reference WV1: Paragraphs 2-4, Page 4; Paragraphs 1-3, Page 7; reference WV2: transportation subsystem, route planner, delivery window estimator component, dispatch subsystem; Pages 18-19, 45-47; Figure 1, Elements 118, 124, 132, 160; Figure 5; Figure 7A, Elements 10-22; reference WV3, Pages 3, 18, 33-35, 38-40):

- checking a list of openings for overlap with the appointment window (zone window creator, delivery window estimator component, delivery window reservation, delivery scheduling, scheduled delivery hours; reference WV2: "One function of the Transportation Subsystem is to generate a list of available delivery windows (for presentation to the customer) based upon transportation capacity data such as, for example, the number of couriers available, the number of delivery vehicles available, the number of orders for a particular day, truck routes, etc.", Lines 20-33, Page 18; Lines 1-18, Page 19; Lines 31-32, Page 44; Lines 31-33, Page 45; Lines 1-11, Page 46;

Figure 7A, Elements 10-22; reference WV3: Page 3, Lines 13-21, Page 21; Lines 19-23, Page 24; Lines 18-22, Page 33; Pages 34-35);

- generating a list of schedulable time blocks if there is no overlap, each of the schedulable time blocks in a list having at least one opening (e.g. adding new routes, providing customer with alternative delivery times/windows if one or more items are not deliverable in the selected time window, window templates, etc.; reference WV2: Lines 31-32, Page 44; Lines 1-2, Page 45; reference WV3: Lines 1-9, Page 7; Lines 11-16, Page 32); and

- assigning the order to the schedule if there is an opening in the list of openings that overlaps the appointment window *or* an opening in the list of schedulable time blocks that overlaps with the appointment window (allocating orders to specific routes, trucks, zones, delivery schedules/windows, stops, etc.; route planner, dispatch subsystem, reserving subsystem capacities; reference WV2: Lines 20-32, Page 18; Lines 21-30, Page 19; Lines 1-8, Page 20; Lines 8-31, Page 38; Lines 1-19, Page 39).

Regarding Claim 9 WebVan teaches a system and method for assigning orders to a schedule further comprising updating a tour time of the shift (schedule, itinerary, route, calendar, etc.), wherein updating includes incrementing the time required to travel to the order and from the order to a next order, wherein updating includes incrementing a booked time for the shift by an amount of time needed for traveling to the order and an amount of time needed to work on the order and wherein updating includes adjusting a load level of the shift to account for the order (reference WV3: "Route Planning", Lines

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20-25, Page 37; Pages 38-40; "Van Stop Process", Pages 64-65; "Tote to Door Process", Pages 65-66).

Regarding Claim 10 WebVan teaches a system and method for assigning orders to a schedule further comprising aggregating at least two orders according to an aggregation criteria (route planning/planer, capacity planning/reservation; reference WV2: Lines 17-25, Page 18; reference WV3: Pages 38-40).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over WebVan as evidenced by at least the following:

I. Clyde, Witt, UPDATE: Material Handling in the Food Industry (October 1999), herein after WV1;

II. Borders et al., WO 00/68859 (November 2000), herein after WV2; and

III. Borders et al., WO 00 (November 2000), herein after WV3

as applied to claims 8-10 above and further in view of Nanry et al., Solving the pickup and delivery problem with time windows using reactive tabu search (2000).

Regarding Claim 11 WebVan teaches teach a system and method for assigning orders to a schedule further comprising further comprising an optimization component for optimizing the delivery scheduling/dispatching of orders (reference WV2: Lines 17-22).

WebVan is silent on the optimization technique/approach utilized by the Scheduling and Optimization component and subsequently does not expressly teach defragmenting a set of free time blocks in the shift as claimed.

Nanry et al. teaches well known techniques for defragmenting (reorganizing, re-planning, optimizing, shuffling, swapping, etc.) a set of time blocks (time periods, route stops, delivery windows, appointments, schedules, vans, trucks, etc.) in the shift (schedule, route, etc.; Section 3.2 Move Neighborhoods, Pages 112-113; Figures 1-3) in an analogous art of assigning orders to time windows for the purposes of developing an initial feasible delivery schedule solution for multiple routes (Section 3.1, Pages 111-112).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for assigning orders to a schedule as taught by WebVan, with its utilization of commercially available software to optimize the scheduling of deliveries would have benefited from utilizing any of a plurality of well known schedule optimization techniques such as defragmenting time blocks in view of the teachings of Nanry et al.; the resultant system/method developing an initial feasible delivery schedule solution wherein all orders are delivered (Nanry et al.: Section 3.1, Pages 111-112).

Regarding Claim 12 WebVan teaches a system and method for assigning orders to a schedule further comprising committing (saving, recording, storing, etc.) the shift, which has been modified to fit the order, to a database (data warehouse; reference WV2: Figure 1, Elements 180; reference WV3: route planner, Pages 38-40).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- LeSaint et al., U.S. Patent No. 6,578,005, teach a system and method for assigning orders (tasks) to available resources (openings) wherein an initial schedule is generated and then optimized/updated as required.

- Solomon, Marius, Algorithms for the Vehicle Routing and Schedule Problems with Time Window Constraints (1987), teaches several well known algorithms for assigning orders to schedules wherein time windows are specified (e.g. routing and scheduling deliveries/service providers to customers requiring service at a particular time and location).

- Dumas, Yvan et al., The Pickup and Delivery Problem with Time Windows (1991) teaches a well known method for assigning orders to an opening utilizing a plurality of constraints including time windows, capacity and precedence.

- Domenjoud, Eric et al., Generating feasible schedules for a pick-up and delivery problem (1998) teaches a method for assigning orders to an opening utilizing one or more assignment constraints such as precedence, time and the like.

- Mitrovic-Minic, Snezana, Pickup and Delivery Problem with Time Windows (1998) teaches a plurality of well known methods for assigning orders to an opening wherein an appointment window/time is specified.

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- Connectria: E-scheduling is next big thing (2000) teaches a commercial system and method for assigning orders to an opening wherein the appointment window and openings are specified.

- Descartes.com Web Pages (2000) teaches a commercial system and method for assigning orders to openings wherein the appointment window and opening are specified. Descartes.com further teaches that the system and method for assigning orders to openings continuously optimizes/re-optimizes the delivery schedules, routes, and loads for the assigned orders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SJ
4/5/2006



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